

1908

V.

Bering Id

July 17²⁹ a.s. Reef ~~Reef~~ Kistich

733 skins 8-53; 9, 110; 10, 138,
11, 211; 12, 161; 13, 50; 14 ~~lbs~~ 10 sts.

Reef 418
Kis. 315

Total skins 2537.

Rikat	13	} 733 hol.
makki	1738	
godvrik	23	
pups	35.	

July 21²² a.s. Reef.
616 skins. — 8, 42; 9, 54; 10, 140;
11, 150; 12, 140; 13, 90 lbs.

Total skins 2141

Sek.	8	} 616. hol.
makki	1436	
godv.	14	
pups	67	

July 23 ^{July 4} o.s. ~~Ref~~ Kis.

217 skins. 7-9; 8, 35; 9, 40;
10, 27; 11, 31; 12, 50; 13, 20;
~~14, 5 lbs.~~ 14, 5 sk.

Total 1047 driven

Lik.	7	} 217. hol.
Males.	779	
Godm.	9	
pups	35	

July 25 ^{July 6} o.s. Ref.

875 skins. 7 none; 8, 56;
9, 107; 10, 194; 11, 241;
12, 114; 13, 103; 14 lbs 60 sk.

Total driven 3064

Lik.	11	} 875. hol.
Males.	2014	
Godm.	5	
pups.	159	

1908
Barrow Id.

July 27th 05. Kivotchen

189 skins. 7 none; 8 lbs 10.
9, 30; 10, 60; 11, 48; 12, 11;
13, 20; 14 lbs. 10.

Total skins 1395.

Sick 4

Meat 1138

Grown 5

pups 63.

} 189 hrt.

July 31st 05. Reef.

532 skins. ^{Aug 12} 7 lbs 25; 8, 100;
9, 100; 10, 80; 11, 90.
12, 36; 13, 40; 14 lbs. 61 sk.

Total skins 2789

Sick 5

Meat 2077

Grown 74

pups 104

} 532 hrt.

July 27 05. Kisorchen
^{Aug 8}

189 skins. 7 none; 8 lbs 10.
9, 30; 10, 60; 11, 48; 12, 11;
13, 20; 14 lbs. 10.

Total skins 1395.

Skr 4

Meat 1134

Grown 5

pups 63.

} 189 hd

July 31 05. Reef.

532 skins. ^{Aug 12} 7 lbs 25; 8, 100;
9, 100; 10, 80; 11, 90;
12, 36; 13, 40; 14 lbs. 61 sk.

Total skins 2789

Skr 5

Meat 2077

Grown 74

pups 104

} 532. hd.

Family SALA

The

FOUR-LEGGED

vomero-palatine
sphenoid in two tooth

About thirty species
family which in its
confined to Europe
India, and in North
resented by two species
or terrestrial; perfect

For each drive a special document "Akt" has to be made out stating the number of seals taken, the name of the rookery and other details. This is signed by the Kruak and by the Marshenar. To it is then attached the receipt "Ritantoia" of the company's representative.

Aug. 13 Arrived off North Ry,
Tuesday. Leaving Island, at 6 am.
The weather cloudy and
a stiff SW blowing.

After breakfast went ashore with my cameras to photograph and see what could be seen.

The first thing that struck me was the diminution in the number of seals on the "sands" of the Reef. The land end of it has shrivelled up; the line of seals across it dividing it has disappeared and the flock at the south east corner has become entirely isolated.

w) Anchored in 7 fathoms; rocks of NW. of Sintch. Kamen visible on the N. side of it; Sintch K. at $85^{\circ}W$; Salthouse S. $15^{\circ}W$.

(13) To show this difference
I took two photos from
my old station on the
landing of the salt house
steps.

The next thing to attract
my attention was the
almost total absence of
the old bulls. I do not
believe there are a hundred
left in the rookery. The
"rookery organization" is
evidently breaking up.

Next I noted that
there was still quite a
number of very small pups
yet in company with their
mothers and which have
not yet "podded." I crept
in close to the flock at
the S.E. corner allowed to above

(13) and took a snapshot which I hope will show this feature. However, the clouds are low and dark, and the wind is howling mercilessly and shaking my camera so that I have but faint belief in any successful pictures. The point from which this last exposure (no. 86) was made, is somewhat nearer the breeding grounds than the one whence G. made his successful picture of which he gave me a print. It is situated on the Ladiginoki peninsula.

These facts have also been noted by the natives and my observations are therefore confirmatory of theirs. They

(13) insist that females are still bringing forth young.

Afterwards walked down to Kisotchuasa Ry. and took a photograph from the old sta. T. It will show - if it shows anything at all - the same shrinking of the area of the breeding ground.

Returning I visited Sullivanof's house and there I got a partial explanation of this shrinkage (which does not seem wholly due to the season) in the figures which he furnished as to the animals contained in all the drives since I left the North Ry. I am certainly very thankful that G. adopted my suggestion to record the

733	2537	1134
616	2141	2077
217	1047	2014
875	3064	779
189	1395	1436
<u>532</u>	<u>2789</u>	<u>1738</u>
3162	12973	9178
	<u>3162</u>	
	9811	

(13) number and kind of seals turned away at the killing grounds. I copied the figures (see ante) of which the following is a summary:

From July 29 to August 12 (n.s.) there has been 6 drives, in which 3162 animals have been killed. But these were culled on the killing grounds out of a total of 12973, or nearly 13000 animals driven; or to put it otherwise, 9811 were rejected out of this ~~above~~ total. But the most significant fact is that of these rejected ones no less than 9178 were females! Just think of it: in order

(13) to ~~but~~ obtain a little over 3000 bachelors it was necessary to drive off our 4000 females! The excuse for this is that in as much as the bachelors do not haul out separately any more, it is necessary to drive the females as well; but it must not be overlooked that even in the old halibut days females were plentiful in the drives, although not to the same extent as now.

Yet, it cannot be emphasized too much: thus far there is no mortality visible among the pups.

Another feature of the above figures is the

424	326	63	448
990	486	280	963
1380	1400	360	1940
2021	1650	270	2651
1932	1680	341	4368
650	1170	600	1339
140	616	260	840
733	616	70	875
7847	5520	217	20449
10.7	10.9	10.3	10.9
5120		740	799

80	175	
270	800	10.7
600	900	10.9
528	800	10.3
132	990	10.9
260	432	10.6
140	520	10.3
189	834	37
2010	5471	10.6
10.6	10.3	
120	532	
	151	

(13) continued abounee of yearlings. Only 93 yearlings and but 9000 females! This is still more remarkable when we consider the great weight of the skins taken. In four of the drives there was not a skin under 8 lbs., while the average is over 10½ lbs. This curious disproportion becomes extremely interesting when ~~being~~ compared with the opposite conditions on Copper Island. There the low weight of the skins, the people killing seals down to 4½ lbs! And yet there is no plenty of yearlings there either! And the same "scraping and

(13) "taking" of the rookeries
there as here. Surely, here
is a good deal of food for
speculation!

J. last night gave
me the following figures
as reported to him. Killed
at North Rookery, D.I. to
date: 5665 koticki;
22 matki (accidentally, or
because injured); 11 yearlings.
On South Rookery, D.I. 324
skins.

During the entire forenoon
and part of the afternoon
the crew was busy taking
on board the salted skins,
first those that were
bundled and finally the
loose skins that are going
to be bundled on board as

(12) well as a member from the last drive which has to be resalted on board the "Kotik". The skins are slid down a chute from the salthouse to the beach below. Here the natives load them upon their backs and carry them ~~down~~^{up} to the water's edge on the rocks, where they are dropped and where the ship's crew take them and throw them into the boat.

A little after noon the "Porpoise" was seen steering east 5 or 7 miles to the north of us.

The work of taking in the skins was finished about 4:30 pm. but as the sw. was still blowing with unabated force, it was decided

(13) not to go round to the village this evening but to anchor up in a safer place somewhat to the east of the rookery. —

In view of the above mentioned "scraping and raking" of the rookeries for the last killable seal - and particularly in view of the fact that this is not the first year that it takes place, Mr. Aulavik having this evening assured me that it has been thus for every one of the last two or three years - the question which he propounded to me this tonight certainly becomes pertinent. "Where do the killable seals of ^{the} next year come from?" If every bachelor

(13) seal within sight has been killed, how is it then that 10,000 to 30,000 killables have been obtained the next year, besides the additions needed on the rookeries for ~~supplying~~ filling the yearly loss of bull? And if ~~they~~ all were not killed, where were they in the mean time? To these questions I had frankly to confess that I ~~do~~ not know, but that I think it is a fair theory to assume that a certain percentage of bachelor seals always stay in the water, and that only ~~most~~ part of them haul out near the

(13) breeding grounds. I pointed out that nowhere had separate hauling grounds of bachelor seals been found very far from the breeding grounds. It is not by any means necessary to suppose that this habit has been acquired of late years, if such it be; it is much more likely that it has always been so in view of the fact that there is no absolute necessity - or immediate benefit to the species - derived from the presence of all the immature individuals at or near the breeding grounds. On the other hand

(13) it would certainly be
beneficial for the preser-
vation of the inborn
tendency to yearly return
to the native locality, if
the habit was kept up
by a large percentage
of each yearly class of
immature seals. This
would then be an ar-
gument against the
proposition to try to
exterminate the seals
in order to exterminate
the seal question and the
pelagic sealing. It cannot
be done, as is also well
shown by the experience
on Tjulung.

Aug. 14 The SW wind blowing with
Wednesday great force we were obliged
to lay to at our anchorage all
day. Passed the time reading
the latest newspapers - up to
June 22.

Aug. 15 The wind being having
Thursday moderated somewhat and
being more southerly we
left our anchorage for Nikolaki
at 6.25 am. The swell, however,
was tremendous and it
was 11.30 am before we came
to anchor. The landing then
became the next problem,
but as we were anxious
to get ashore and at the
same time not wished our
things to get wet, we left
them behind, except my
camera box. Our boat consequently
by not being very heavy we

(15) landed dry on the Reef, and I was once more "at home". There is nothing to be done, however, for the wind and swell continuous so nothing can be brought ashore, and as the next trip is to be with the "Kotik" to the South Hookery, D.I., I will have to wait till she has unloaded her goods.

~~When~~ I mentioned this evening to Mr. Kuzs that I had observed a number of very young pups on the North Ry. the other day, and at the same time expressed the opinion that this is nothing unusual, but that now the rookeries and the seals are under constant and

(15) anxious inspection many things appear unusual and new simply because no attention has been paid to the questions in the case of plenty. Mr. Kluge at once agreed in so far as this point is concerned, for it was his own observation on Tjuleni in former years that ^{some} pups ~~were~~ were regularly born very late in the season.

Aug. 16 The "Kotik" has been busy Friday unloading and I getting ready for the trip tomorrow to Poludjornaja Rookery. We are ready to start in the morning.

Weighted myself - 148½ lb.
(4 pad 4½ lbs Run.)

576 Had a good Russian bath before going to bed.



Latitude about $54^{\circ}57'$
waterfall

Aug. 17
Saturday. Tonight and early I went
on board the "Kotik" and
after breakfast we started
for Poludimuraja Rookery,
in front of which anchor
was dropped about 11.15 am.

I had hardly time to
greet my old friend Ni-
Kaur Grigorief, the "Pro-
fessor", as we used to call
him, now starthorn of
this rookery, as the Captain
only gave me to 2.30 pm
to get through with my work.
Consequently, I started at
once for the rookery with
my camera and plane table.

The breeding ground - for
I saw no bolustiaki - is the
merest little patch, with
not a single sikatch at the

(17) present. It was said in the village that there had only been one skatch this season, but Nikanov informed me that so was not literally the case, the number having been five. Thus far he has secured 405 skins.

I was able to get very close to the grounds which were occupied by mother and pups only. A good many of the latter were in the water - where of course quite a number of females also - but there was also quite a large part of smaller pups right at the ~~upper~~^{northern} edge of the herd. I was again impressed, as before on Kichotelnaja, by the action of the females and young

(17) when the females haul up from the water and go in search of the young to ^{to} nurse her. The ground is here so small that it is a comparatively easy task for the mother to find its young, and I consequently observed several dripping wet cows nursing pups. The mothers in coming out of the water made straight for the pod of pups and the usual performance of pups rushing up and ~~then~~ upon being now at critically rapid and the speech continued was gone through. So much is absolutely certain, the females do not nurse the pups promiscuously.

(17) I am Thoroughly convinced by what I have seen that the mother wanders considerable distances and spends ^{much} considerable time in searching for her own individual child. Whether a mother who had searched in vain for a long time and whose milk was pressing her very strongly might not finally give in to the importunities of a particularly hungry pup is something which a question which it will probably never be possible to answer definitely, but I think such cases are the exceptions; the rule is certainly the reverse.

(17) The rookery ^{to the crest of the water-fall} is situated on a steep pebbly beach at the western third of a wide curving bay, outside of which there are a number of rocks. The breeding seals and their pups occupied a small semi-circular area on the beach. A number of them were also seen upon the rocks to the westward.

After the inspection of this rookery, which certainly looked quite different 13 years and 4 days ago (Aug. 21, 1892) when I estimated the number of seals to be 20000 to 25000, ~~a number~~ (see Deutsch. Geogr. Abh., VII, 1885, p. 238) a number certainly too great

(17). but on the other hand
descriptive of a condition
widely different from the
present handful of seals—
I continued my walk
along the shore until I
reached Steller's Arch, of
which I made several
photographs, finally returning
the same way to the landing
place.

I tried ~~too~~ very hard
to get a photograph of the
arch from exactly the same
standpoint as my sketch,
(published in *Arctic Geogr.*
N. Am.), but in vain. The
eye is much more wide
angled than the lens, and
I had to stand my camera
at a much greater distance

(17) in order to get the entire arch in.

Lindquist at noon got a very good observation ^{by the waterfall} for latitude which he determined to be $54^{\circ}57'N$.

After supper we arrived in Ganan again, where we found H.B.M.S. "Porpoise" at anchor next to the "Jakut". "Jakut" left shortly afterward, and so did the "Kotik".

This was the last trip of the "Kotik" to the island ~~before~~ ^{until} he finally touches here ~~before~~ on his way to San Francisco, probably about the 8th of September. As I have not been able to make any other obser-

(17) guments I had to answer
Mr. Malarski yesterday
when he asked me, that
I should probably have to
go with him til San Francisco,
although his date is
earlier than I could wish
it. If I do I shall be
unable to settle for myself
the question whether there
is any unusual mor-
tality among the pups in
fact or the workers here.
It has been impossible to
approach the captain of
the "Jakut" as I and he do
not seem to be on speaking terms.
"Jakut" is therefore out of
the question. Tomorrow I
shall have to put on civilized
clothes again and call on

(17) the captain of the "Porpoise".
Something may then turn
up. We shall see!

Aug. 18 Sunday When the service flag on
board the "Porpoise" was taken
down J. and I went on board
to call on the captain. The
reception of the 'governor' of
the islands was as ceremonious
as could be desired by the
most exacting. As we arrived
a line of red coated white-
helmeted marines ~~presented~~
arms as well as when we
left, and as we were well
again in our boat the Russian
flag was saluted with ^{some} ~~several~~
guns. No fire on us!

We only saw the Captain
and the first officer, both
very nice and agreeable

(18) gentlemen. The visit lasted almost an hour. The "Porpoise" sailed about 6 p.m.

In the afternoon I finished up the sketch map I made yesterday of the environs of the Poludjonnaja Rookery.

Today I witnessed scenes which I never believe I should see on Berning Island, and which would have been impossible 12 years ago. Then the natives were forbidden to make "bar" of sugar, and it was not allowed to sell them liquor. On special occasions, or as a particular premium for extra exertions or services G. used to treat them to a drink, or occasionally

(18) a bottle. Since then things have changed. Who is responsible for the abolition of that wholesome law I do not know, but whoever it is, he has ruined the population of these islands. Now the natives are allowed to buy - individually and collectively - as much spirits as they can find money to pay for. The "community" imports it by the whole sale, and on the big holidays it is divided up according to "shares". J. told me that they took out for today 200 rubles worth. It is big praznik - Probozhenie - the transformation - and ^{even} at the evening

(18) Mauser has been transformed into a drunken brat, the Russian fashion of celebrating a church holiday. During the afternoon three men had to be arrested on account of their fighting. Hearing this the starshena, Piotr Andukovski jr., otherwise a quick and unorthodox man, in a ^{drunken} crazy spell rushed to G's house and told him that he had no business to arrest these men and acted so wildly that he had to be locked up too, and will cease to be starshena. And all this for this miserable cursed liquor.

Aug. 19 With plenty of rain and
Monday. wind outside this was an
ideal day for packing up,
and I have done nothing
else. Yet, I am not through.
The difficulty is not about
what to pack, for there is
very little to bundle up and
store away. There have been
no opportunities for collecting.
My gun has not been out
of the case yet, except for
oiling. Birds are exceedingly
scarce, and moreover, when
shores I find time to hunt
birds. The seals have had
the preference every time
the weather has permitted.
The difficulty therefore is not
the overwhelming quantity

(19) of the stuff, especially since the natives bring nothing in as I have refused to promise to pay with alcohol, the only thing which nowadays can move them but the trouble is that I do not know exactly how to pack the few things I have - possibly just because they are few. Then, in addition, I do not know yet exactly how and when I am going to leave the island. The "Kotik" is expected here on its way to San Francisco any time between the 6th and 10th of September. There are two reasons why I have not yet made up my mind definitely to

(19) go on her. First, there is one more important question to ~~settle~~^{investigate} here on the islands and that is whether there is any abnormal mortality among the pups on the rookeries late in fall, or not. Thus far there have been no indications of such a state of affairs, but it is too early yet to say for certain that there is no such mortality, or that there will be none. Second, I would like very much to return by way of Japan.

Go's disagreement with the captain of the "Jakut" makes it inexpedient to attempt any passage by that road. The captain

(191) of the "Popoiri", on the other hand, voluntarily told me that he could take me to Hakodate, when he leaves after October 6th - provided I am here on official business. This making the thing so exclusively and expressly official causes me to hesitate, the more so since the ~~made~~^{extended} no definite or formal invitation, and I should not like to request him to transport me. However, when he leaves the island on Thursday or Friday next, I will try to have him invite me to go with him to Petropavlovsk to take the "Kotik" there. Till then I will defer making a

(19) final decision. I ~~could~~ can easily leave the island now for there is nothing on the rookeries ~~down~~ to especially engage my attention at the present time, and were it not for the possibility of the extra mortality among the pups later on, I would not hesitate a ^{minute} ~~moment~~ in returning at the earliest possible moment. As I intend to make another inspection of North Rookery on Wednesday and Thursday next I will have to get my things packed, in case I should get the chance to go to Petropaulski, and they must be packed with that possibility in view. And

(19) here is where the difficulty lies.

J. this evening made mention again of the "so-called" "Secret", that the naval guard which was stationed on Tjulurij in order to protect the island against the poachers, on the contrary made common cause with them, 3000 skin being thus secured. Whether the thing is to be hushed up or not in St. Petersburg, time will only show. This custom of stationing a naval guard of an officer with 20 men during the summer and fall dates from 1884.

Aug. 20
Tuesday.

Finished packing, and as the weather was decent tried to do some photographing about the village, but the mosquitoes soon drove me in. They were awfully bloodthirsty and very plentiful. There was but little wind, and it was warm for being Bering Island, viz 55°F. , so the mosquitoes had a grand time while I had not.

Gorbitski mentioned this evening that a species of bat is now found at the village, but that he had failed thus far to get a specimen. It was first observed a couple of years ago. It is evidently introduced from

(20) Kautchatka in the fire
wood.

Upon inquiring I found
that the jarte village at
Staroy Gavan has been
razed and that only one
man, Vasilij Stepanov, now
keeps any garden there.
All the gardens are now
as *Fedotkija*.

Aug. 21 ^{the afternoon showed a regular 22° sun halo.}
Wednesday The dog sledge appeared
at the door at 10 am
and in a quarter of an
hour I was off. It was
a dense fog with prospects
of rain, but it looked
to me as if the north
side might be clear. G.
however, remained behind.

The trip to Luvnij was
unsuccessful. The dogs are

(21) good, but the driver young
and not very skilful, so
he managed to drop me
off the sledge just as we
entered the burning village.
The road was not so
wet as formerly so the
drive was more comfortable
for man than for beast.
As suspected there was
no fog on the north side,
though it was cloudy and
rather dark.

Kranaja Riba were
pushing their way up the
little streams and hundreds
upon hundreds were laying
dead already ^{along} the entire
way. Took a couple of
photos which ought to
show it well, though I

(21) did not manage to photograph a scene with any extraordinary number of dead fish, as I did not wish to go far from the track.

Upon arrival at
Sennar ^(about 3.15 pm), I put up at
the company's house which
I found even dirtier than
before and made my
dinner of hard tack and
corned meat with tea.
And this is what Mr.
Huge asks 75¢ a day
for. There can be no
doubt that he is going
to charge me too much
for board and lodging,
but there I am helpless
and will have to pay.

(21)

Went at once to the rookery, but as the wind was bad had to watch and photograph from the distance only. The seals have now left the 'sands' almost entirely, and most of the females were in the water. The pups are spreading, and a lonely sketch was seen here and there near the water's edge. On Simtchi Kamen I observed a single sea lion chattering among the seals.

From the Reef I then went to Kishotchnojo with the same result. Females, and especially pups,

(21) now hauling out on all the rocks in the water on both sides of the rookery.

In the mean time the "Porpoise" had arrived and anchored off the rookery. A boy came running to Kibotchaaya to inform me that a boat had been landed and that some of the officers were on shore. I at once returned and found the captain with the doctor and ^{three} another officer who were making inquiries about the drive tomorrow morning. It was decided to have it come off about 7 am. Much against my protest, on account of my

(21) continue the captain carried me off to the vessel for dinner and to stay one night. So spent a very pleasant evening and night in the captain's cabin.

day 22
Wednesday After having taken breakfast on board, the Captain & I in one boat and officer and petty officer to the number of about 20 in another went ashore about 7 am. and found the Staropena with the natives waiting. Very shortly after the whole company, Indian file, proceeded to the reef making and in short order drove off nearly all the seals located on the reef itself.

(22) The whole place, after the
drain was over was com-
pletely razed, not a
oak left. The whole brackish
ground, not located on
outlapping rocks - and it
was now low water - was
gone over and nearly all
driven off. The Englishmen
in boats and smoking at
a great rate enjoyed the
unusual sight immensely.

4 Down on the rookery
ground I was startled by
the great number of dead
pups. I was wholly un-
prepared for this, because
at the great distance from
which it has been neces-
sary to watch the rookeries
here, the small bodies of the

(24) dead seals have not been
noticeable; in fact, I do
not see how in the binnacles
they could have been dis-
tinguished from sleeping
ones. ~~It was easy to~~
~~distinguish~~ those which
were lying in a ^{series}
row along the ^{high water} ~~low~~ margins
of the rocks. ^{more conspicuous} These had
evidently been washed ashore.
A good many of them were
in an advanced stage of
putrefaction - some entirely
flattened out and without
hair. But an equal pro-
portion ~~had~~ ^{more} evidently
died recently being in
good condition. There was
another class of pup car-
casses, viz those which were

There in binnacles did not necessarily die at once;
They died at low tide and were washed up.

(22) Lying dead upon the ~~upper~~ higher portion of the breeding ground ^{very} back from the water's edge. These were mostly all in good condition and appeared as if they had died within a few days.

When the seals were driven off, as many of the pups as possible were allowed to escape into the ^{sea} water, and they availed themselves of the opportunity offered to go off in large flocks. But there was a considerable number of pups that stayed behind singly and which upon our approach made but feeble attempts at getting away. Evidently something

(22) was the matter with them. Upon closer examination they were found to be very weak and their thin and pinched appearance ^(was) at once noticeable. They were starving. Their shoulder blades and ribs and hips were sticking out in strong contrast with the rounded and plump forms of those who had camped off with the others. Upon handling the ~~dead~~ carcasses, both in the wind row and in the higher ground the same state of affairs was apparent: extreme lean-ness, and emaciation. After the rookery had

(22) been completely cleared
I took my notebook and
walking along the beach
began to count the number
of dead pups, making a
distinction between those that
were in good condition and
those carcasses that were
in an advanced stage of
decay. I had gone about
half way round and
counted about 200 of
the former class and 150 of
the latter (last leaf of this note
book) when the starshman
arrived and said he had
order from the Kosak Sili-
vanof, to ask me to leave
the rookery at once. It
was evident later that
Sullivan was uneasy because

(22) he thought the number of dead pups might in some way become charged against the management, for he tried to make the whole thing a small affair and explained to me that the number of dead pups was due to their being trampled upon by the skatchis. But for those very good reasons this theory does not hold. (1) In the first place, there are now very few skatchis on the rookery at all, entirely too few to be able by any possibility to kill even a small fraction of the pups which have recently died.

(2) If this trampling upon

(22) cannot the death of so many pups, how many should we not expect in a drive like the one today, where ~~up~~ hundreds ~~upon~~ ~~hundreds~~ are trampled upon, not once, but over and over again. Yet, not a single dead pup was found in the wake of the drive?

(3) This explanation does not account for the emaciated condition of the bodies of the dead ones.

Being the necessity of complying with the order to leave the rookery I could not finish my count. I am pretty positive, however, that the

(22) following estimate is not much out of the way. I may preface it by saying that the number of dead bodies on the east side appeared to be about double that on the west side.

Dead pups on west side counted about	350
do. do. on east side estimated	700
do. do. on high ground about (estimated)	200
Total	1250

Without making any allowance for bodies overlooked as hidden among the rocks etc. etc.

In walking off the rookery I took from the ~~off~~

(22) high ground 2 bodies which
seemed quite fresh and, ^{from} which,
therefore, it would seem possible
to determine the cause of
death. In lifting the record
up by the flippers I was
somewhat startled by finding
it still gasping, but it was
much too weak to give any
signs of life when lying on
the ground. I carried it up
to the killing ground where
the rest of the company had
congregated, but the pup
had died before I reached
there. The other pup had
apparently died during the
night. I left the pups with
the Rosaki's boy to carry to
the house, and in reaching
home I found that in his

(23) zeal to serve me he had
already started to skin
them - local fashion - thus
spoiling them for specimens.
However, for any purpose of
a postmortem they were
all right. I took the ship's
doctor with me, Dr. Lloyd Thomas,
who on viewing the opened
bodies with me agreed that
death was due to inanition
lack of food; starved to death.
There was not a trace of
fat left in the tissues under
the skin, nor in the muscles.
The extreme leanness of the
carcasses was very noticeable.
Both of us, afterward, ^{commonly} called
special attention ^{upon} to the
plumpness of the average
jimp as they appeared in the

(22) drink.

I satisfied myself, while on the rookery that the fresh ^{bodies} ~~carcasses~~ on the wind row were in the same condition, and the fact that they were thus thrown up on the beach by the water signifies but little, for we have had no severe weather as yet, and it is therefore impossible that ~~the~~ these pups could have been killed by any "surf nip". They died at low ebb.

There was another matter to which I called the special attention of the English gentleman while we were on the rookery, viz the presence, and very

(22) ^{smelling} ~~offensive~~ presence of
simplified excrement on
the rocks and stones, particu-
larly mentioning that the British
Commissioners in their reports
had stated the reverse to
be the ^{case} ~~fact~~. In fact, the
fecal matter was making
it very slippery in places,
and to it was added the
yellow clotted milk vomited
up by the pups as they
were hurrying out of our
way.

A few of the pups have
assumed the gray coat, but
the great majority are still
black.

I was very anxious to
take a few photos of some
of the leading features of today

(22) drive, but the weather prevents. In the morning it was a foggy drizzle, dark and disagreeable, and in the afternoon it turned into downright rain. +50°F. All I could do was to make a few film snap shots with my 3 1/2" which I could carry under my rubber coat, during the middle of the day showing some incidents of the killing. These were enjoyed immensely by the Englishmen, and I believe almost every man on board was given a chance to witness at least the killing.

Capt. Francis R. Pilley kindly offered to take me round to Aikoloki tomorrow

(22) and from there to Petropaul-
ski where he has to go
no later than the 24th. As
it was reported, however,
that there is fog in the
village today and as the
wind is southwesterly which
may make landing difficult
I had to decline the in-
vitation as I cannot go
to Petropaulski without my
things, which might be
necessary, if he ~~could~~
cannot land ~~there~~ in Javan
tomorrow. Under those
circumstances I think it
is safer for me to take
dayledge tomorrow morning
early for the village, and
I have consequently ordered
me for 7 am. tomorrow.

(22) The drive was the ^{next to} largest of the season yielding 903 skins. No exact tally of the escaping females etc could be kept partly because killing was going on in several places at the same time, partly because the presence of the many spectators who materially interfered with the count. However, the drive did not in this respect differ from the foregoing ones as fully 4000 animals were driven off the rookery. Whole pods had to be let go because not a single holmstick was among them. The average weight was probably somewhat less than formerly, but the skins were of very good size indeed.

(22) As usual with similarly large drives of former years the seals were driven in squads of 200-300 and not in one big body. On the killing ground they were again collected into two large herds. The separating out of the killing pods was very quiet and deliberate and not attended with the same worrying of the whole herd as was the case with the drive I witnessed on St. Paul, where the animals had to be driven several times into the lake to cool off.

This enormous big drive during which the

12

(22) whole breeding ground of
the big rookery was ^{thoroughly} swept
clean. I suspect to be
due to the fact that the
men ^{have already} received their share
— or the greater portion of it —
of the community payment
for the skins turned in this
season. The amount was
considerably below that of
any former year and
this wholesale effort is
evidently brought on by a
desire to add to the fund
to be finally distributed, as
otherwise many of the
inhabitants will run short
of what may now be fairly
termed as necessities of
life.

558 Some of the difficulties atten-
ding travelling with dogs

(22) was sadly exemplified tonight, for as I was going the change six plates in my holder by the light of my ruby lantern which broke on the first dog sled trip, I found that of the six plates in the box, 4 were broken into fragments and 2 thereby scratched so much as to have become useless. So I had to give up changing plates as I had no others with me.

This evening a man brought me a partial albino of an Uria arva. Only the anterior part of the head and the throat are black; on the rest of the upper part of the body there are

(22) a few scattering black feathers among the white ones. The wings are black irregularly marked with white both on coverts and quills, and almost symmetrically on the two wings; tail white. Iris brown; bill black; feet above clay colored, webs and soles dark brown. It was shot at Japading ^{last} ~~this~~ evening, but the bill was shot off and it was too wet and dirty to be preserved.

Sibirumof brings me the following tally of the drive ~~yesterday~~. It was evidently kept by some of the boys as I know S. did only attempt a count at the beginning of it. It is as follows:—

(22) Sikauchi 8
 Maaki 2948
 Yearlings 181
 Pups 295
 Stokut. 905

Total
 4337

1 Maaki died on the road.

Weight
 lbs 7 — 4
 8 85
 9 139
 10 215
 11 203
 12 179
 13 28
 14 52
 905.

However, the above
 shows at any rate pretty
 conclusively that my estimate
 that our Hove animals

(22) were driven was accurate. The proportion of females to killed males may therefore be taken as correct. It is interesting to note the somewhat unusual large number of yearlings, but after all, what a pitiful showing in this class! The weight is up to the former average notwithstanding my impression to the contrary which was based upon the returns of the earlier part of the killing.

Aug. 23 7 am. A last look at the
Thursday rookery shows that the females and pups have returned to the same place as before, the rookery looking today exactly as it did yesterday morning before the drive. I exposed a plate

(27) but it is doubtful whether it will show much.

Vasilij Oudakovski, although ordered to be with his dogs at my door at 7, did not show up and when at 9 I found that Ivan Oudakov's sledge team had arrived from Saravna, I engaged him at once and off we went. It had rained heavily during the night and the roads were consequently in a frightful condition. The dogs liberally dragged me through a continuous mud puddle for more than twelve miles. Add to this a nasty drizzle and you may imagine how comfortable a ride it was especially as I had to fight

(23) off the various mosquitoes
with my mud begrimed
hands. Covered with mud
and blood - from the mosquitoes -
I arrived in Jorua about
12.30 pm. via Ladigirok,
where I found 4 frame houses,
one roofed with sod, the
others shingled.

The pup carcass was
at once put in alcohol,
civilized dress put on and
the things packed and
made ready for departure,
for the "Porpoise" was already
at anchor in the harbor.

Shortly after Dr. Thomas
arrived with the Captain's
invitation to come on board
and go to Rethroauloki. He
and I then made a call

(23) at Gribnitoki. I specially informed the latter of the number and condition of dead pups found yesterday on the rookery and suggested that he order a detailed count at the end of the season, which he promised to send me by the "Jakut".

The captain also came ashore and at 5 with the officers I went on board the *Porpoise*, where I was made as comfortable as a man can be on a vessel, and spent a very pleasant evening.

Aug 2 J. told me that it was the intention of making two or three more drives on the North rookery and expects to

(23) have about 2000 skins for the "Kotik" observing that of late years the greatest catch was made in August, as the seals arrive so much later. To this is to be remarked, however, that the great catch of 905 skins yesterday was only due to the extraordinary large number of seals driven off, and that there was no greater proportion of killables than earlier in the season.

Aug. 24
Saturday. The day passed pleasantly on board and was spent in reading, conversation and watching the races on deck between the men gotten up by the officers. The latter

(24) in the evening invited me to dine with them in the ward room.

The weather was moderate, but cloudy and cold, I was perfectly comfortable.

Aug. 25 ^{and foggy} Cloudy, and big swell, Sunday. but fair wind. Lighted land about 1 p.m., but did not get any good view of the mountains which were mostly enveloped in fog and clouds. Reached Bay entrance and the harbor were the same glorious landscape as formerly. Upon coming to anchor went immediately on board the "Kotik", but returned late with Capt. Pelly and had supper on board the "Porpoise" with him and his guest and my old friend

(25) Capt. Gribby of the "Bobik" which we found at anchor next to the "Kotik". The "Jakut" is also here.

Gribby reports about 1300 skins from Tjulenij. Females were numerous and Sikatshi in about the proportion of 1 to 40.

Malarnuski is not quite well yet. I told him of Gribb's intention to visit Coppers Island in the "Jakut" and to return to Bering with the "Kotik".

Aug. 26
Monday. A glorious morning. Kamsaraja Syka comes up in the back ground, the same magnificent sight as always. Wish the photo may ~~show~~ ^{show} at least a fraction of

(26) its beauty. How green and attractive do the trees look on the hills! And then the incomparable bay in which all this glory is reflected.

Grisby mentions that there was an unusual mortality among the pups on Tulemy. Also that the yearlings were quite scarce. The skins taken were of good weight.

In the forenoon attended with Kalavavotai an auction of 5 or 6 sea otter skins. The auction was conducted by the ispravnik and his assistant in full uniform. The attendance consisted of some of the merchants and nearly all the officers.

(26) of the Yakut, of which
the captain purchased
one large skin and the
doctor another, somewhat
damaged one. For the good
skins the price ranged from
about 500 to 605 rubles
apiece.

By the kindness of
the chief linguist of the
Att "Porpoise" I had a
chance of changing plates
and was thus enabled to
make several exposures which
I hope may show some features
of the fine scenery which
surrounds us.

Aug. 27 I set a couple of traps
Tuesday. for mice and traps last
night and visited them this
morning, but not a single
one had been touched.

(27)

Potpongin also asserts that the smaller mammals are now very rare and that one has to go way into the interior or into the mountains to find either Spermophiles or Arctomys. Waiting as we do for the company's steamer from Vladivostok before the arrival of which we cannot sail, and also not yet knowing whether we can clear from this port without having all the skins aboard taking the rest on the island it is impracticable to leave the immediate vicinity of the vessel.

In the afternoon made several visits up-town, to Sandelin, Mr. Pasty and finally

(27) The Russian doctor, Dr.
who informed me that he
had found two kinds of
salamanders in Kamtschatka
and one lizard. Upon procuring
the specimens I found that
he had two adults and
a number of ill preserved
larvae of the Salamandrella
rossensis, and that the
lizard was only a dried
up specimen of the same
species. He promised me
one of them.

Spitzberg and I took
a walk out to the cemetery
which we found in a very
dilapidated and disgraceful
condition. In contrast to this
I may in justice mention that
the streets, especially the bridges

(27) and the plank side walks are in better condition than 12 years ago. Gronberg in again alluding to the mortality of the pups on Tjalernij mentioned that he had based his belief that they had been killed by the sikatchi stepping on them upon the fact that the carcasses bodies were very much flattened out, but upon reflection he agreed with me that the flattening out of the body is rather due to their being walked over by the numerous seals after death, not before.

"Th'jathut" left in the evening.

Aug. 28

Wednesday. Rain and fog! This is very much as on the island, the result being the same; nothing can be done out of doors.

(28)

Called on the "Apravnik" at the Quarantine and found him a pleasant although rather retired gentleman of few words. He has only been here a few weeks.

Got one Microtus subulatus in a trap and skinned him.

Aug. 29
Thursday

Weather fine, but can go nowhere except just round the vessel on account of the uncertainty of leaving due to the nonarrival of Mr. Grinevald's steamer. Under these circumstances I dare not go beyond hail, especially since it is not even certain that the "Kotik" will have to return here from the islands for her clearance.

574

Have been through the forms to see if I cannot

(29) pick up something Hamtcha-
dale for the museum. There
are a number of Kuklam-
kas, shoes and mittens, but
they are made by the Russians
for the market and there is
nothing aboriginal about
them. It would be dangerous
to bring them home as
having any bearing on
Hamtchakkan ethnology,
so I will not spend any
money on that thread. On
the whole, there will be
precious little for the museum.
The prices, besides, are enormous
and are intended for the
man-a'-war's man altogether.

Aug. 30 Still no steamer, but
Friday. "Jubal" returned this morning
after a cruise in the outer
bay of some hours' duration.

1301

Obtained the following data from Capt. Lindquist concerning the seal catch of late years, which are in a separate table.

To mice in the traps.

Spectable frame broke

In the evening there was an entertainment given aboard to "Porpoise" to which we ^{all} were invited. The blue-jackets went through a very creditable program of song, music etc. which was very much enjoyed. Said good bye to the Captain and officers with thanks for their many kindnesses as the "Porpoise" leaves the harbor tomorrow morning.

Aug. 31 There being no chance
Saturday yet in sight, Capt. Lind-
quist and I took a long
walk from which we did
not return until 4.30 pm.
We went first round the lake
and from its northern end
walked up to the top of
the second ridge in the
direction of Koriakojärvi,
he armed with my camera
and tripod, I with my
gun. Hardly a bird was
seen on the whole trip
except a single Nucifraga
caryocatactes which
disappeared before I could
get within range. This
scarcity of birds is very
remarkable. Thus far I
have only observed: Em-

(31) *viza variabilis*; *Phylloscopus*
bonalis; *Cuculus pusillus*; *Parus kamoharui*; *Sitta*
albifrons; *Monticola kamoharui*;
M. melanops; *M. vittatus*;
Corvus orientalis; *Pica kamoharui*;
L. caesia;

Stirundo hyemalis had already
left before my arrival.

The most interesting
part of the day's work was
the finding of obsidian
implements and chips at the
old village site at the
lake just where the road
to Sareglaskij turns up
towards the hills. They were
found, some on the surface
of the trail, some by digging
into the earth just under

(31) the grass roots.

From a large number of crabs brought up by the seine today I selected the two extremes, the broadest with narrowest side spines and the broadest with bluntest side spines. These two specimens which I have preserved are the two extremes of a very large series, about 30 which to my mind prove conclusively that Telest's figure is entirely incorrect and must be left entirely out of consideration.

In the evening shot a short-eared bat.

Sep. 1. Thursday, dark weather.
Sunday. Capt. Lindquist gave me an account of the origin of salmon

(1) off the Kommandor Islands
in recent years.

In 1891 the "Albat" seized
James Hamilton Lewis, American,
caught right under the
Santa Rookery, A. I. July 16, 11 pm.

In 1892 no less than
7 schooners were seized. The cruiser
"Jabriaka" seized 4, one American
and 3 British. "C. H. White" of
San Francisco, ~~Hitton~~ July 16 '92
11 pm between Cope and Aring I.

Willie McGowan ^(Victoria) was seized
near; in Petrop. July 28. Then
British schooner "Ariel" arrived
in Petrop. Aug. 6. - "Harcourts Belle"
was not seen by the "Kotik".

"Carmelite," ^{of Vancouver} was seized by
the admiral ^{Marched} in the corvet "Vitiag"
later part of August.

The "Rodie Olsen" of Victoria
D.C. capt W. Kafe was seized
by Grinitoki in the "Kotik" on

580

July 26. Aug. 21.

(A) July 26, 1892. The 'Kotik' left North Rookery at 1.30^{pm} for Nikolok and at 2.20 pm sighted the schooner in ~~the~~ NW about 8 miles distant. J. ordered chase and she was captured about 3.45 pm in Lat. N. $55^{\circ}23'20''$, Long E. $167^{\circ}27'$ and towed to Nikolok where they arrived at 9 pm. On the way 5 canoes with their crews returning from the hunt were picked up. A prize crew was put on board; the schooner arrived in Petropavlovsk Aug. 2.

The 'Kotik' while in Glin-ka, C.I., Aug. 21, 1892, sighted a schooner at 1 pm to the eastward. Gorbunski ordered chase; she left Glinka 1.40 and got up to the vessel after making 12 miles $E\frac{1}{4}S$ from Glinka. She

(1.) was found to be the "Maria" of Maitland, N.S., S. Balcan capt. Only one boat, the capt, mate and 2 men were on board, the remaining 21 of the crew with 5 boats and one canoe were out hunting. For some time nothing could be seen of them and the "Kotik" went in search of them heading for SE Cape. One boat was picked up 4 miles from the Cape, and 2-3 miles from the Cape, two more boats. They all had seals in the boats, 17 in all there. Position of "Maria" when seized Lat. N $54^{\circ}36'$, Long E $168^{\circ}24'$. The schooner picked up the other boats during the night. She was sent to Petropavlovsk in charge of a prize crew, arriving Aug 28.

582 All the skins (except 1000 reserved by the government) were sold by auction in Petropavlovsk; the seals in Vladivostok

Sep. 2

Monday.

Went with Lindquist to Sareglaska in order to look for stone implements, but found none. Sareglaska is a small village of a couple of hundred inhabitants about $3\frac{3}{4}$ verst W. of Petropaulski in Avacha Bay. The place looked considerably cleaner and more prosperous than Petropaulski. Took a few $3\frac{1}{2}$ photos.

In the evening the dog Harry caught an arvicola but bit it so terribly that I despaired of being able to preserve it. As it is the only specimen of the species thus far obtained I went to work, however, at once to clean it and skin it, and in the hurry forgot to take any

(2) measurements. This must
be an "off" year for once
as I have failed to get more
than one specimen in my
traps and my promise of
paying 20 Kope. for each mouse
or bat brought in by the
boys has not resulted in
securing any.

This is the 25 years
anniversary of my in-
matriculation as student
at the Kristiania university.
Tonight all the old boys -
or as many of them as
are alive and have been
able to go to Kristiania
are together and my thoughts
and best wishes are with
them and the old country.

Sep. 3 Spent almost the whole
Thursday forenoon trying to fix up the
Arvicola and succeeded in
making a skin which will have
to do in default of something
better. Set 10 traps in the evening.

Malanowski has finally
got tired of waiting for Mr.
Grinnell and his skinner, and
has decided to go to the island
tomorrow in order to take the
skins, returning to Petropaulski
as soon as possible. I am glad
of it, for this stay in Petropaul-
ski within reach and call of
the steamer is only waiting time,
as there is no chance of collecting
anything of interest, and while
I may not be able to do much
on the island on account of the
hurry, yet I will have a chance
to see North Rorky, B. I. once more.
In the afternoon took a

- (13) walk with Lindquist and picked up a fine fragment of an abridian implement. It was found in the path at the southern end of the narrow strip of land which separates the lake - or lagoon - west of the town, from the bay.

Sep. 4
Wednesday Not a single mouse had been near the traps when I looked after them this morning.

Visited Dr. Tushoff who had just received from a man in the interior a bottle with specimens in alcohol, mostly insects. It also contained a Salamandrella and a Petromyzon. Dr. T. collects them for the present governor in Aradys, who is somewhat of a naturalist,

(4) more particularly anthropologist, from Murkwa.

Received from the Capt of the "Gakut" invitation for tomorrow celebration of the battle of Petropaulski Aug 29 1857.

Mr. Nealavanski struck to his determination to go to the island and at 1.45 we started out of Petropaulski harbor. Cloudy, but clearing up outside. Sea smooth. Met in the entrance to Antech Day the four masted schooner Ethel James, of San Francisco, loaded with lumber for the new lighthouse.

Sep. 5 Wind against us and a
Thursday tremendous sea. Sick; in bed
all day. Her to.

Sep 6 Do
Friday do
Sep. 7 Do. do. Got up for supper
Saturday no weather is moderating somewhat
Finally in sight of snow patches on
Bering Island.

According to Lindquist the
Alaska Commercial Co's lease expired
in February 1891, for which name
it claimed and got the sealing
the full catch 1890, some 5000
skins which the "Alexander"
received before May '91. The trans-
fer to the new company was effected
that summer. According to the new
contract the government receives
11 rbs per skin, of which it pays
to the natives 1.50 per ^{skin} for finding and
salting. The company has nothing to
do with the sealing except providing
the salt, as the government's contract
is to deliver the skins at the ship's side.

Oguz

19 Aug. '95 O.S.

From Moreschischnik	56
" Reef	706
" Kishotsnife	117
	<hr/> 879

12 Aug. O.S.

From Kishotsnife	231
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- (7) A deposit is paid in St. Petersburg each year for the next year's catch, formerly in 30000 skins, but this last year only in 15000. The government also undertakes to order all the goods to be sold in the stores. Hence much loss and confusion. Seems a very bad arrangement.

Sep. 8
Sunday.

Engelhard at Adulskiy 6.30 am.
Mr. G. seems to say much

stress upon the capture of the last 2000 seals so late in the season as an argument in favor of the later arrival of the seals nowadays against a few years ago. But really, how much is there in it? Would anybody in earnest maintain that it would have been impossible in former years of abundance to have "reiked and scraped" the rookeries late in the season after the main catch of 50000 skins had been taken with a proportionate result? Formerly, the season closed early in August

(8) with a net result of an average of 5000 and nobody cared for anything after that; but it is safe to admit that at least 10000 serviceable skins could have been secured in addition during the following months, if a similar policy of "scrapping" had then been pursued. And so with the stageyess of the skins! The first signs of it in the dogs was sufficient to stop further sealing; now the stagey seals are simply let go and the ^{few} good ones taken.

590 Day beautiful in town and at the village, but high wind at sea and on the mountains. Spent afternoon evening onboard the Popin³ with the captain and officers.

Seals are now operating. On Aug 19 a.s. 56 skins were taken from Marokmuk, and now seals are reported at Fortanka.

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Leonhard Stejneger
U.S. Fish Commission.

